Bruhat Bangalore Mahanagara Palike
Executive Engineer Byatarayanapura Division,

Name of Work: Modified Estimate for Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	Removing and resetting of footpath slab								
	Vemmanna Layout								
	Main Rd	2	150.00	0.90		270.00			
						270.00			
	Deduct 42%					114.75			
						155.25	**Cum**	**246.52**	**38,272.23**
	Approved Rate	**246.52**							
2	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								
	RCC Darin								
	Munireddy Layout								
	2nd A Cross Rd	1	80.90	1.10	1.00	88.99			
	Cross Rd	1	11.40	1.10	1.00	12.54			
	Drain Desilt								
	Main Rd	2	124.00	0.60	0.60	86.54			
	Asphalt Road								
	Vemmanna Layout								
	1st Cross Rd	2	182.80	0.35	0.20	25.59			
	3rd Cross Rd	2	65.20	0.35	0.20	9.13			
	Munireddy Layout								
	2nd A Cross Rd	2	83.40	0.40	0.20	13.34			
	2nd B Cross Rd	2	60.00	0.35	0.20	8.53			
	Main Rd	2	107.30	0.30	0.20	12.88			
						257.53	**Cum**	**214.63**	**55,273.90**
	Approved Rate	**214.63**							
3	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications								
	RCC Darin								
	Munireddy Layout								
	2nd A Cross Rd	1	80.90	1.10	0.15	13.35			
	Cross Rd	1	11.40	1.10	0.15	1.88			
						15.23	**Cum**	**6408.76**	**97,602.21**
	Approved Rate	**6408.76**							
4	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
						0.00	Cum	6256.45	0.00
	Approved Rate	**6256.45**							
5	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification.								
						0.00	Sqm	274.63	0.00
	Approved Rate	**274.63**							
6	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate								
	Drain Desilt								
	Main Rd	4	124.00	0.15	0.10	7.39			
						7.39	**Nos**	**6609.54**	**48,871.32**
	Approved Rate	**6609.54**							
7	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately)								
	RCC Darin Raft								
	Munireddy Layout								
	2nd A Cross Rd	1	80.90	0.90	0.15	10.92			
	Cross Rd	1	11.40	0.90	0.15	1.54			
	RCC Darin Wall								
	Munireddy Layout								
	2nd A Cross Rd	2	80.90	0.15	0.60	14.56			
	Cross Rd	2	11.40	0.15	0.60	2.05			
						29.07			
	Drain Bed Correction								
	Main Rd	2	124.00	0.60	0.15	22.43			
						51.50	**Cum**	**7230.80**	**372382.70**
	Approved Rate	**7230.80**							
8	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.								
	For Rcc Darin 60 kg/cum	1	29.07	60.00		**1758.88**			
						1.76	**m**	**106354.96**	**187065.54**
	Approved Rate	**106354.96**							
9	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, copmplete.								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	RCC Darin Covering Slab								
	Munireddy Layout								
	2nd A Cross Rd	1	80.90	0.90		72.54			
	Missing/ Damage Slabs	337	0.60	0.90		181.98			
						254.52	**Sqm**	**2173.53**	**553208.17**
	Approved Rate	**2173.53**							
10	Providing and Fixing pre cast Covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. As per Engineer incharge								
						0.00	**Sqm**	**5283.81**	**0.00**
	Approved Rate	**5283.81**							
11	Supplying and fixing M15 grade precast cement concrete 600 x 300 x 150 mm Kerb Stone for Roadway, Sidewalls and gutters fixed with CM 1:3 fixed and finsihed in line as per direction of Engineer in charge.								
						0.00	**Nos**	**488.10**	**0.00**
	Approved Rate	**488.10**							
12	Painting Two Coats on New Concrete Surfaces Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concretesurfaces.								
						0.00	**Sqm**	**110.77**	**0.00**
	Approved Rate	**110.77**							
13	Earth work in surface Excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In all kinds of soils upto 300 mm depth.								
	Asphalt Road								
	Edge Correction/ Cut Porstion								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	1.15	0.30	63.07			
	3rd Cross Rd	1	65.20	1.00	0.30	20.16			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	1.20	0.30	30.02			
	2nd B Cross Rd	1	60.00	1.15	0.30	20.70			
	Main Rd	0.884	107.30	1.00	0.30	28.46			
	Profile Correction	13	4.00	3.00	0.30	46.80			
		10	3.00	2.00	0.30	18.00			
		20	3.00	3.00	0.30	54.00			
		10	2.00	3.00	0.30	18.00			
		15	3.00	2.50	0.30	33.75			
		20	4.00	1.50	0.30	36.00			
						368.96	**Cum**		

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
					Upto 125%	187.13	Cum	75.00	14034.38
					Above 125%	181.84	Cum	75.00	13637.65
	Approved Rate	**75.00**							
14	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density								
	Asphalt Road								
	Edge Correction/ Cut Porstion								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	1.15	0.25	52.56			
	3rd Cross Rd	1	65.20	1.00	0.25	15.33			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	1.20	0.25	25.02			
	2nd B Cross Rd	1	60.00	1.15	0.25	17.25			
	Main Rd	1	107.30	1.00	0.25	26.83			
	Profile Correction	13	4.00	3.00	0.25	39.00			
		10	3.00	2.00	0.25	15.00			
		20	3.00	3.00	0.25	45.00			
		10	2.00	3.00	0.20	12.00			
		15	3.00	2.50	0.20	22.50			
		20	4.00	1.50	0.20	24.00			
						294.48	**Cum**		
					Upto 125%	**233.91**	**Cum**	**2762.44**	**646169.25**
					Above 125%	**60.56**	**Cum**	**2762.44**	**167303.24**
	Approved Rate	**2762.44**							
15	Providing and applying Primer Coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical								
	Asphalt Road								
	Edge Correction/ Cut Porstion								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	1.15		210.22			
	3rd Cross Rd	1	65.20	1.00		67.19			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	1.20		100.08			
	2nd B Cross Rd	1	60.00	1.15		69.00			
	Main Rd	1	107.30	1.00		107.30			
	Profile Correction	13	4.00	3.00		156.00			
		10	3.00	2.00		60.00			
		20	3.00	3.00		180.00			
		10	2.00	3.00		60.00			
		15	3.00	2.50		112.50			
		20	4.00	1.50		120.00			
						1242.29	**Sqm**		
					Upto 125%	**935.63**	**Sqm**	**48.46**	**45340.39**
					Above 125%	**306.66**	**Sqm**	**48.46**	**14860.92**
	Approved Rate	**48.46**							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
16	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction								
	Asphalt Road								
	Edge Correction/ Cut Porstion								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	1.15	0.05	10.51			
	3rd Cross Rd	1	65.20	1.00	0.05	3.36			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	1.20	0.05	5.00			
	2nd B Cross Rd	1	60.00	1.15	0.05	3.45			
	Main Rd	1	107.30	1.00	0.05	5.37			
	Profile Correction	13	4.00	3.00	0.05	7.80			
		10	3.00	2.00	0.05	3.00			
		20	3.00	3.00	0.05	9.00			
		10	2.00	3.00	0.05	3.00			
		15	3.00	2.50	0.05	5.63			
		20	4.00	1.50	0.05	6.00			
						62.11	**Cum**		
					Upto 125%	**46.79**	**Cum**	**10545.59**	**493401.79**
					Above 125%	**15.33**	**Cum**	**10545.59**	**161629.80**
	Approved Rate	**10545.59**							
17	Providing and applying Tack Coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom								
	Asphalt Road								
	For DBM								
	Edge Correction/ Cut Porstion								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	1.15		210.22			
	3rd Cross Rd	1	65.20	1.00		67.19			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	1.20		100.08			
	2nd B Cross Rd	1	60.00	1.15		69.00			
	Main Rd	1	107.30	1.00		107.30			
	For BC								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	5.35		977.98			
	3rd Cross Rd	1	65.20	4.35		233.48			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	4.80		400.32			
	2nd B Cross Rd	1	60.00	4.10		246.00			
	Main Rd	1	107.30	4.80		515.04			
	Profile Correction	13	4.00	3.00		156.00			
		10	3.00	2.00		60.00			
		20	3.00	3.00		180.00			
		10	2.00	3.00		60.00			
		15	3.00	2.50		112.50			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
		20	4.00	1.50		120.00			
						3615.10	**Sqm**		
					Upto 125%	**3118.75**	**Sqm**	**16.15**	**50367.81**
					Above 125%	**496.35**	**Sqm**	**16.15**	**8016.07**
	Approved Rate	**16.15**							
18	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction								
	Asphalt Road								
	Vemmanna Layout								
	1st Cross Rd	1	182.80	5.35	0.04	39.12			
	3rd Cross Rd	1	65.20	4.35	0.04	11.33			
	Munireddy Layout								
	2nd A Cross Rd	1	83.40	4.80	0.04	16.01			
	2nd B Cross Rd	1	60.00	4.10	0.04	9.84			
	Main Rd	1	107.30	4.80	0.04	20.60			
						96.91	**Cum**	**12244.03**	**1186530.11**
	Approved Rate	**12244.03**							
19	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.								
	Asphalt Road								
	Vemmanna Layout								
	1st Cross Rd	2	182.80	0.10		36.56			
	3rd Cross Rd	2	65.20	0.10		13.04			
	Munireddy Layout								
	2nd A Cross Rd	2	83.40	0.10		16.68			
	2nd B Cross Rd	2	60.00	0.10		12.00			
	Main Rd	2	107.30	0.10		21.46			
						99.74	**Cum**	**551.56**	**55012.59**
	Approved Rate	**551.56**							
20	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3)								
	From Item No-02					257.53			
	From Item No-13					368.94			
						626.46	**Cum**		
					Upto 125%	**521.69**	**Cum**	**85.39**	**44546.90**
					Above 125%	**104.78**	**Cum**	**85.39**	**8946.74**
	Approved Rate	**85.39**							
21	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km								
	From Item No-21	1	626.46	1.28		801.87			
						801.87	**T.Km**		
					Upto 125%	**667.75**	**T.Km**	**121.16**	**80904.59**
					Above 125%	**134.12**	**T.Km**	**121.16**	**16250.22**
	Approved Rate	**121.16**							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	EIRL								
E1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications.								
	Flagging Course								
	Main Rd	2	131.50	0.20		52.60			
						52.60	**Cum**	**1231.21**	**64761.71**
	Basic Rate	**1067.00**							
	Arear Weightage	**106.70**							
	Sub Total	**1173.70**							
	Tender Permiun 4.90%	**57.51**							
	Total Rate	**1231.21**							
E2	Providing B S slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. as directed by the Engineer in Charge of the work								
	Munireddy Layout								
	2nd A Cross Rd	1	24.30	0.90		21.87			
						21.87	**Cum**	**878.01**	**19202.14**
	Basic Rate	**837.00**							
	Tender Permiun 4.90%	**41.01**							
	Total Rate	**878.01**							
								Total Construction Cost	**4443592.37**

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

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ಬ್ಯಾಟರಾಯನಪುರ ವಿಭಾಗ
ಬೃ.ಬೆ.ಮ.ಪಾ, ಬೆಂಗಳೂರು

Technical Sanction
Accorded For Rs 4443592.37
Head of A/C 3726
CER NO : 61 **Dt:** 13.03.23

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